

OPzV series are 2V cells made in gel technology, with a tubular (armoured) positive plate. Thanks to this, their design life can reach in the standby use **over 18 years at 25°C**. EUROPOWER OPzV cells are also suitable for deep discharges and their cyclic life amounts to 1700 cycles for 80% discharge depth.

TECHNICAL DATA

Nominal voltage	2 V		
Nominal capacity	3000 Ah / C ₁₀		
Cell per unit	1		
Technology	GEL		
Design life	over 20 years @ 20°C* over 18 years @ 25°C		
Dimensions	height	802,0 mm	
	length	576,0 mm	
	width	212,0 mm	
Weight	~228 kg		
Capacity @ 25°C	24h	134A @1,80V/cell	3216,0 Ah
	10h	300A @1,80V/cell	3000,0 Ah
	3h	756A @1,75V/cell	2268,0 Ah
	1h	1687A @1,70V/cell	1687,0 Ah
Ambient nominal temperature range	charge	0°C ~ 40°C	
	discharge	-20°C ~ 50°C	
	storage	-20°C ~ 40°C	
Internal resistance	@ fully charge battery	≤0,108 mΩ	
Charging voltage @ 20°C	standby use	2,25V (-3 mV/°C)	
	cycle use	2,35 V do 2,40V (-4 mV/°C)	
Charging current	recommended	300 A	
	maximum	750 A	
Capacity retention during storage @ 20°C (self discharge)	after 1 month	99 %	
	after 6 months	92 %	
	after 12 months	84 %	
Container material	standard	ABS UL 94-HB	
	optional	ABS UL 94-V0**	
Terminal	faston F1	M8	
Terminal hardware initial torque		15,0 Nm	

*)- According to Eurobat (Long Life group)

**)- Flame-retardant

NO TRANSPORT RESTRICTED

Not restricted for air, surface and water transport. Classified as non-hazardous material (IATA/ICAO Special Provision A67, DOT-CFR Title 49 parts 171-189, IMDG amendment 27)

DISCHARGE CHARACTERISTICS

• Constant current (Current [A], 25°C / 77°F)

F.V. V/cell	Discharge time										
	30 min	1h	3h	4h	5h	6h	8h	10h	24h	48h	100h
1,90	1524	1158	639	534	457	394	318	264	119	66	35
1,85	1786	1450	714	574	492	427	351	294	129	70	38
1,80	2124	1560	738	592	508	442	361	300	134	74	40
1,75	2322	1638	756	606	520	454	369	307	136	75	41
1,70	2412	1687	772	616	528	463	376	312	139	76	42

• Constant power (Power [W/cell], 25°C / 77°F)

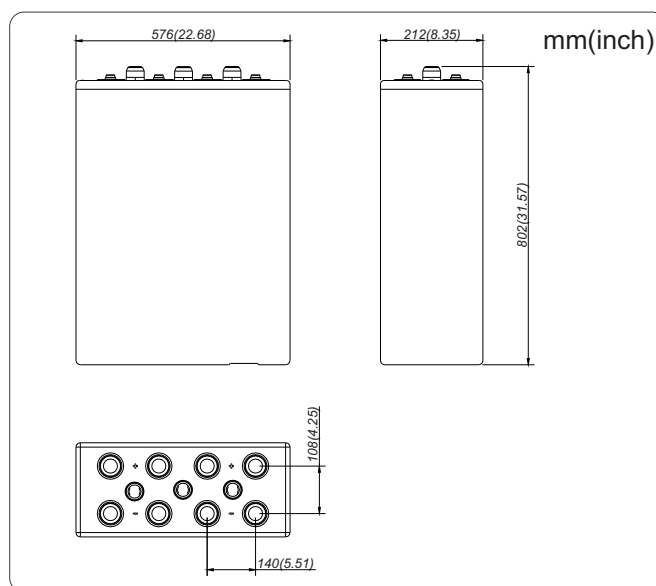
F.V. V/cell	Discharge time										
	30 min	1h	2h	3h	4h	5h	6h	8h	10h	16h	24h
1,90	3767	2529	1737	1406	1083	936	755	626	527	340	231
1,85	4128	2841	1916	1455	1143	965	832	690	581	375	255
1,80	4296	3054	1991	1530	1203	992	869	720	606	391	266
1,75	4475	3267	2064	1574	1233	1040	915	762	639	412	281
1,70	4664	3441	2124	1614	1283	1078	933	774	651	420	285

F.V. - Final voltage

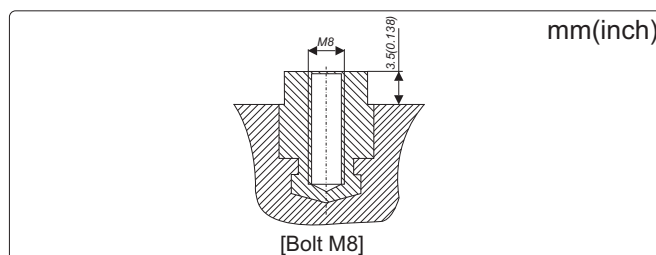
APPLICATIONS

- Uninterruptible Power Supplies (UPS)
- Telecommunication power plants
- GSM base stations
- Substations
- Cable television
- Renewable energy sources

DIMENSIONS

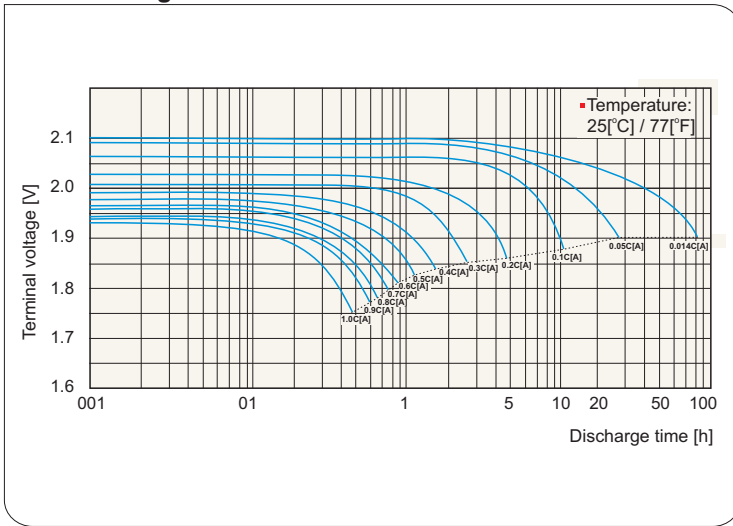


TERMINALS

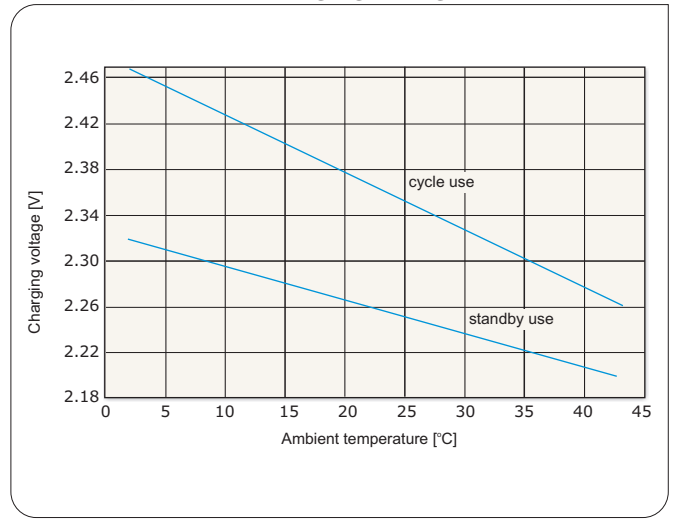


24 OPzV 3000

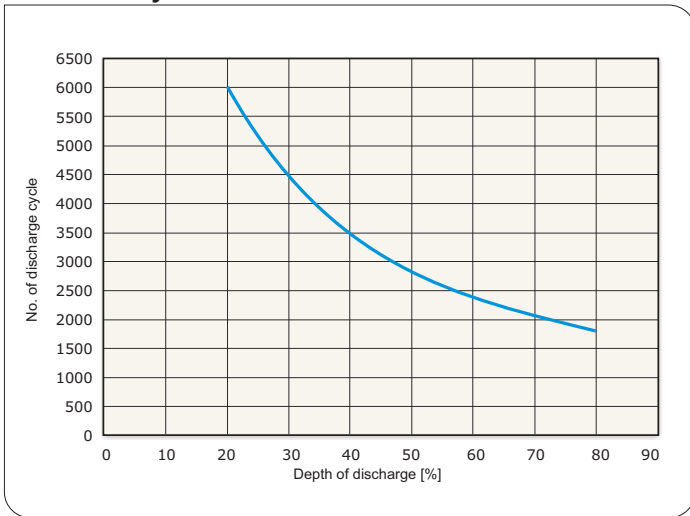
Cell discharge characteristics



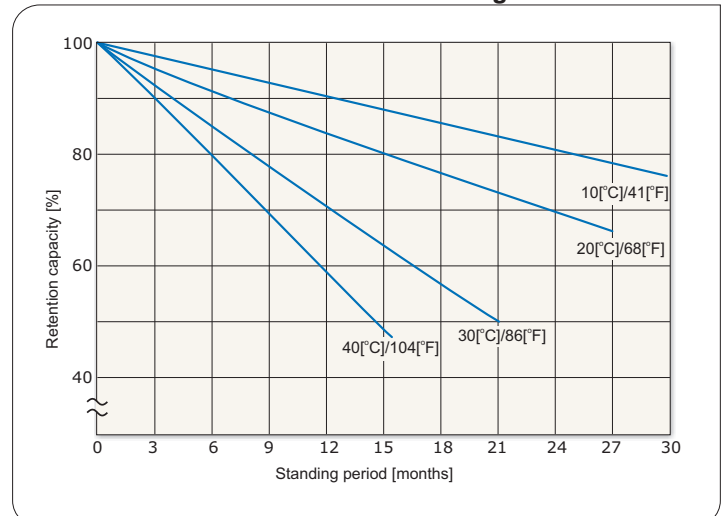
Relationship between charging voltage and temperature



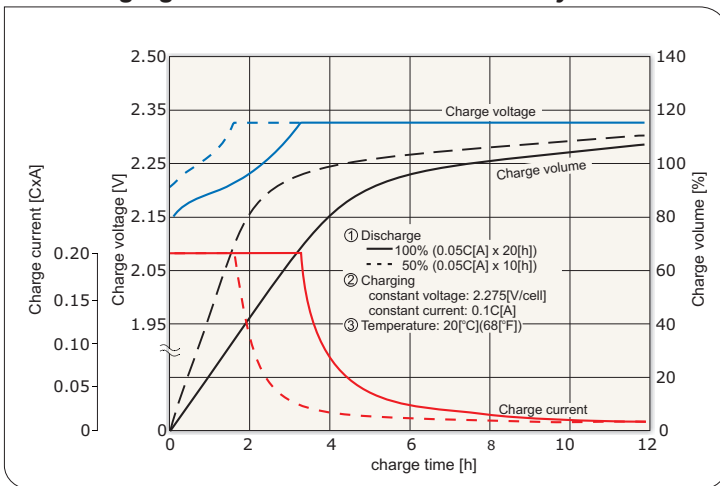
Cell life in cyclic use



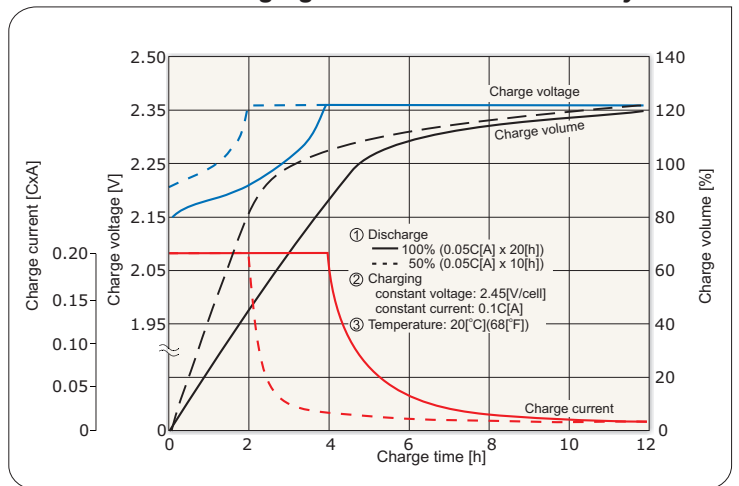
Cell self discharge characteristics



Cell charging characteristics for the standby use



Cell charging characteristics for the cycle use



Battery discharge current and final discharge voltage

Discharge current [A]	$0.2C > I$	$0.2C \leq I < 0.5C$	$0.5C \leq I < 1.0C$	$1.0C \leq I$
Final discharge voltage [V/cell]	1.90	1.85	1.80	1.75

*) C - Capacity

